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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,644	02/06/2002	Christine Dalmazzone	612.41120X00	4504

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EXAMINER

POLITZER, JAY L

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 10/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
10/066,644

Applicant(s)
Dalmazzone Et A;

Examiner
Jay Politzer

Art Unit
2856



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Feb 6, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Serial Number: 10/06,644
Art Unit: 2856

Title: METHOD AND DEVICE FOR EVALUATING DURING DRILLING
THE CAPACITY OF WELL FLUIDS TO FORM HYDRATES
Filed: 2/06/02
Inventor(s): Dalmazzone et al
Attorney(s): Schiavelli

DETAILED ACTION

ABSTRACT:

1. The Abstract of the Disclosure is objected to because:

P2 should be T2

Correction is required. See M.P.E.P. § 608.01(b).

REJECTIONS UNDER 35 U.S.C. § 112:

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-7 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For example:

Regarding Claim 1; P2 should be T2. For purposes of examination, that is what is assumed.

Regarding Claims 1-7; "hydrate" is indefinite because many gases form hydrates. -Methane hydrate- is preferred.

REJECTIONS OVER PRIOR ART UNDER 35 U.S.C. § 103:

4. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person."

5. Claims 1-7 are rejected under 35 U.S.C. § 103 as being unpatentable over Elliot et al, hereinafter Elliot, in view of Rheometric Scientific, and further in view of Sakaguchi et al, hereinafter Sakaguchi.

Regarding Claims 1 and 6-7; Elliot teaches that hydrate formation (and dissociation or melting) is a function of temperature and pressure at Col 1, Li 66-67, and Col 2, Li 9-11. Elliot doesn't teach apparatus to measure hydrate dissociation. Rheometric Scientific teaches a pressurized differential scanning calorimeter in the introduction and at P 39, under "Use Encapsulation". It would have been obvious to one of ordinary skill in the art at the time of the invention to use the Rheometric Scientific instrument to determine dissociation temperatures because it is state of the

art. Rheometric Scientific fails to teach thermograms that show the critical temperatures directly.

Sakaguchi shows such thermograms in Figs 1-2. It would have been obvious to one of ordinary skill in the art at the time of the invention to use Sakaguchi's method to display the critical temperatures with Rheometric Scientific instrument because that is the accepted method in the art.

Regarding Claim 2; it is obvious to use the pressure of well fluid in the appropriate zone where hydrate formation is likely.

Regarding Claim 3; it is obvious to test anti-hydrates in this apparatus. (Sodium Chloride is often used for this purpose.)

Regarding Claim 4; these temperature ranges are obvious in view of published data. Elliot shows hydration temperatures for a CO_2/CH_4 mixture in table 1. Similar data can be found for CH_4 .

Regarding Claim 5; the ramp rates are obvious to one skilled in the art.

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DESCRIPTION OF UNAPPLIED ART:


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure because it teaches other studies of hydrates.

INQUIRIES:

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jay L. Politzer whose telephone number is (703) 305-4930 and whose facsimile number is (703) 308-7382
8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached at (703) 305-4705.
9. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4900.

jlp 9/30/02

72P


HEZRON WILLIAMS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800